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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,732	12/03/2004	Kenichi Hamu	262218US2XPCT	8622
22850 7590 06/24/2008 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER ZHAO, XIAO SI				
ART UNIT 4172		PAPER NUMBER		
NOTIFICATION DATE 06/24/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/516,732

Applicant(s)

HAMA ET AL.

Examiner

XIAO ZHAO

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 8 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE-US)
Paper No(s)/Mail Date 12/3/2004
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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DETAILED ACTION

Claims 1-10 are pending. Claims 8 and 9 are withdrawn from consideration and thus, claim 1-7, and 10 are under examination.

Election/Restrictions

1. Applicant's election without traverse of claims 1-7, and 10 in the reply filed on 6/4/2008 is acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims 1-7, and 10 are rejected under 35 U.S.C. 103(a) as being obvious over Hama et al. (US 6,924,001 B2) in view of Hidenori (JP 10-258825).

The applied reference has common inventors - Kenichi Hama, Tsuyoshi Kage, and Takumi Kobayashi with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e).

This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Claims 1-7, and 10 are drawn to a CVD film forming apparatus comprising of a film forming chamber formed by providing one columnar body serving as an external electrode having a plurality of housing spaces for housing one plastic container each in said housing spaces so that the central axis of each of said housing spaces is parallel with the central axis of said external electrode wherein housing spaces are arranged side by side at equal intervals on the same circle which uses the central axis of said external electrode as a center point. Internal electrodes are insulated by an insulating member from the external electrodes; a cover is used for the housing spaces; a plurality of said film forming chambers are arranged on a rotation support body at equal intervals in a circular state; hydrocarbon gas or Si-containing hydrocarbon gas are used as

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source gas which is converted to plasma; and high frequency supply are used to supply a high frequency to the external electrodes. Two, three, and four housing spaces can be used in each external electrode.

Hama et al. teach a plasma CVD method to vapor deposit a DLC film on the inner surface of a plastic container (col. 1, 20-22 and claim 1) wherein the containers use a cover (col. 3, 26-28). The external electrodes have a cylindrical shape or a columnar structure formed from a single columnar body (col. 4, 7-11). The number of plastic container housing spaces can be two or more, and preferably four spaces (col. 4, 50-55, also see Fig. 1-6 for more detail on the orientation of the housing spaces); the source gas is preferably a hydrocarbon gas or a Si-containing hydrocarbon gas (col. 4, 57-59); and the apparatus is for manufacturing a DLC film which is simultaneously formed inside surfaces of a plurality of plastic containers (col. 4, 62-65). The columnar external electrode which includes housing spaces provides the central axis which is parallel to each of said housing spaces and is positioned on the same circle in the same cross section of said columnar external electrode wherein said fellow housing spaces are arranged at equal spacing; internal electrodes are arranged inside said plastic containers; and a high frequency power supply is connected to provide power to columnar external electrodes (claim 1). The source gas generates plasma between the external electrode and internal electrode (claim 5).

Hama et al. fail to teach that three housing spaces can be used in each external electrode and that the external electrodes are arranged on a rotation support body at equal intervals in a circular state.

Hama et al. disclose that two or more plastic container housing spaces can be used in each external electrode (col. 4, 50-55), but preferably four spaces. It would have been obvious to one ordinarily skilled in the art at the time of the invention that since Hama et al. was able to utilize two, four, and even eight housing spaces in the external electrode (see Fig. 4) three housing spaces would have been an obvious variant of Hama et al.'s teachings.

Hidenori teaches an apparatus for manufacturing DLC film coating plastic envelopes ([0010]) in which two or more chambers characterized by its external electrode ([0014]-[0020]) are arranged in order. The external electrodes are arranged on a rotational support body at equal intervals in a circular state (Drawings 3 and 8). It would have been obvious to one ordinarily skilled in the art at the time of the invention to utilize Hidenori's teachings with Hama et al.'s invention because this enables mass production of the films so commercial success can be achieved (see Hidenori, [0019]).

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140

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F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 6924001 in view of Hidenori (JP 10-258825).

Claims 1-9 of '001 teach all the limitations of claim 1 but fails to teach that the housing space has a lid and that the external electrodes are arranged on a rotation support body at equal intervals in a circular state.

Hidenori teaches an apparatus for manufacturing DLC film coating plastic envelopes ([0010]) in which two or more chambers characterized by its external electrode ([0014]-[0020]) are arranged in order. A lid is used to cover the chamber

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((0014)). The external electrodes are arranged on a rotational support body at equal intervals in a circular state (Drawings 3 and 8). It would have been obvious to one ordinarily skilled in the art at the time of the invention to utilize Hidenori's teachings with Hama et al.'s invention because this enables mass production of the films so commercial success can be achieved (see Hidenori, [0019]) and maintain proper pressure inside the chamber during the formation of the film.

Conclusion

Claims 1-7, and 10 are rejected.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to XIAO ZHAO whose telephone number is (571)270-5343. The examiner can normally be reached on Monday to Friday 7:30 am EST to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on (571)272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Xiao S Zhao/
Examiner, Art Unit 4172

/Alain L. Bashore/
Primary Examiner, Art Unit 1792